GLOSSARY

Attainment: The designation given to an area that meets all National Ambient Air Quality Standards.

Carbon monoxide (CO): A poisonous gas that is odorless, colorless and tasteless. At low levels it causes impaired vision and manual dexterity, weakness and mental dullness. At high levels it may cause vomiting, fast pulse and breathing followed by a slow pulse and breathing, then collapse and unconsciousness.

Inhalable particles (PM10 and PM2.5): A broad class of particles sometimes simply referred to as "soot." One of the "criteria pollutants," PM10 particles are 10 microns or smaller in diameter. The pollutant increases the likelihood of chronic or acute respiratory illness. It also causes difficulty in breathing, aggravation of existing respiratory or cardiovascular illness and lung damage. In addition it causes decreased ability to defend against foreign materials. New laws have just been passed regulating PM2.5, an even smaller and more harmful class of fine particles less than 2.5 microns in diameter. Missouri is beginning to monitor its concentrations.

Lead (Pb): Airborne lead appears as dust-like particles ranging from light gray to black. Low doses may damage the central nervous system of fetuses and children, causing seizures, mental retardation and behavioral disorders. In children and adults, lead causes fatigue, disturbed sleep and decreased fitness, and it damages the kidneys, liver and blood-forming organs. It is suspected of causing high blood pressure and heart disease. High levels damage the nervous system and cause seizures, comas and death.

Missouri Air Conservation Commission: The governor appoints this seven-member group. The commission carries out the Missouri Air Conservation Law (Chapter 643, Revised Statutes of Missouri). The primary duty of the commission is to help Missouri achieve the National Ambient Air Quality Standards set by the Environmental Protection Agency.

National Ambient Air Quality Standards (NAAQS): Standards set by the U.S. Environmental Protection Agency that limit the amount of six air pollutants allowed in outside air. These six are carbon monoxide, inhalable particles, lead, nitrogen dioxide, ozone and sulfur dioxide. The limits are based on what is safe for humans to breathe.

Nitrogen dioxide (NO2): A poisonous, reddish-brown to dark brown gas with an irritating odor. It can cause lung inflammation and can lower resistance to infections like bronchitis and pneumonia. It is suspected of causing acute respiratory disease in children.

Nonattainment area: A region in which air monitors detect more of a pollutant than is allowed by the National Ambient Air Quality Standards set by the Environmental Protection Agency. EPA may designate a region as a "nonattainment area" for that pollutant.

Ozone (O3): Three atoms of oxygen; a colorless gas with a pleasant odor at low concentrations. The layer of ozone in the atmosphere protects the earth from the sun's harmful rays. Ground-level ozone is a summertime hazard produced when hydrocarbons from car exhaust and other fumes mix in the presence of sunlight with oxides of nitrogen from power plants and other sources. Ozone is more easily recognized in smog, a transparent summer haze that hangs over urban areas. The result is a gas that aggravates respiratory illness, makes breathing difficult and damages breathing tissues. Victims include people with lung disease, the elderly, children and adults who exercise outside.

Reformulated Gasoline (RFG): A fuel blend designed to reduce air toxins and volatile organic compound (VOC) emissions by decreasing the amount of toxic compounds such as benzene, lowering the evaporation rate and increasing the amount of oxygenate blended with the fuel.

State Implementation Plan (SIP): A plan submitted by the Missouri Department of Natural Resources to the Environmental Protection Agency for complying with national air quality standards. Each plan concerns one air pollutant for one nonattainment area.

Sulfur Dioxide (SO2): A colorless gas with a strong, suffocating odor. Causes irritation of the throat and lungs and difficulty in breathing. It also causes aggravation of existing respiratory or cardiovascular illness.